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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,177	06/06/2001	Joseph Lincoln Komen	24484	7704

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EXAMINER

WHITE, EVERETT NMN

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/875,177	Applicant(s) KOMEN ET AL.	
	Examiner EVERETT WHITE	Art Unit 1623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
- 4a) Of the above claim(s) 3,49 and 77 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,30-48 and 50-63 is/are rejected.
- 7) ☒ Claim(s) 8-29, 64-76, 78 and 79 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. The amendment filed November 17, 2003 has been received, entered and carefully considered. The amendment affects the instant application accordingly:
  - (A) Comments regarding Office Action have been provided drawn to:
    - (i) 103(a) rejection, which has been maintained for the reasons of record.
2. Claims 1-79 are pending in the case.
3. Claims 3, 49 and 77 have been withdrawn in compliance with the species requirement set forth in Paper No. 4.
4. The text of those sections of title 35, U. S. Code not included in this action can be found in a prior Office action.

### *Election/Restrictions*

5. Applicant's election of species, which includes cellulose as the carbohydrate product, nitroxides of the heterocyclic oxammonium salts as the primary oxidants, chlorine dioxide as the secondary oxidant, and a chlorine dioxide/hydrogen peroxide mixture as the tertiary oxidant in Paper No. 4 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Upon the allowance of a generic claim, Applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of the allowed generic claim as provided by 37 CFR 1.141.

Claims drawn to the elected species are Claims 1, 2, 4-48, 50-76, 78 and 79.

Claims 3, 49, and 77 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 4 since Applicants did not distinctly and specifically point out the supposed errors in the restriction requirement.

The species requirement has been made Final.

6. This application contains Claims 3, 49 and 77 drawn to an invention nonelected with traverse in Paper No. 4. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 103***

7. Claims 1, 2, 4-7, 30-48 and 50-63 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Besemer et al (WO 95/07303) in view of Ashida et al (US Patent No. 5,824,462) or Chen et al (US Patent No. 4,480,089) for the reasons set forth on pages 3-5 of the Office Action mailed August 13, 2003.

8. Applicant's arguments filed November 17, 2003 have been fully considered but they are not persuasive. Applicants argue against the rejection on the ground that there is no suggestion in either Besemer et al or Ashida et al to combine these prior art documents. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, a person of ordinary skill in this art would be motivated to combine the teachings of the Ashida et al patent and Chen et al patent with that of the Besemer et al patent since all the patents set forth procedures drawn to bleaching or oxidizing carbohydrate compounds.

Applicants argue that the bleaching processes disclosed in the Ashida et al patent are not the same as the oxidation process set forth in the Besemer et al patent. Applicants argue that bleaching is not trying to oxidize cellulose. This argument is not persuasive since bleaching is synonymous with oxidizing. One of ordinary skill in this

Art Unit: 1623

art would consider the terms oxidizing agent and bleaching agent as obvious variants of one another.

Furthermore, in regard to Applicants arguments regarding bleaching vs. oxidizing, obviousness does not require absolute predictability. It is well established in patent law that it is not necessary in order to establish *prima facie* obviousness that the prior art suggest their combination to achieve the same advantage or result discovered by Applicant.

Applicants argue that Chen et al use a hypohalite instead of chlorine dioxide, peracetic acid, hydrogen peroxide or other chemicals for bleaching, and therefore Chen et al does not suggest the use of chlorine dioxide. This argument is not persuasive since at column 2, 2<sup>nd</sup> paragraph, the Chen et al patent discloses the use of chlorine dioxide, peracetic acid, and hydrogen peroxide to bleach cellulose. A preference for a hypohalite does not mean that other agents such as chlorine dioxide cannot be used as a bleaching agent. Accordingly, the rejection of Claims 1, 2, 4-7, 30-48 and 50-63 under 35 U.S.C. 103(a) as being unpatentable over the Besemer et al patent in view of the Ashida et al patent or the Chen et al patent is maintained for the reasons of record.

9. Claims 41, 54, and 57-61 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Besemer et al in view of Ashida et al or Chen et al as applied to Claims 1, 2, 4-7, 30-48 and 50-63 above, and further in view of Tang et al (US Patent No. 4,401,810) for the reasons set forth on pages 5 and 6 of the Office mailed August 13, 2003.

10. Applicant's arguments filed November 17, 2003 have been fully considered but they are not persuasive. Applicants argue that the Tang et al patent adds nothing that makes up for the alleged deficiencies of the rejection based upon Besemer et al in view of Ashida et al or Chen et al. The Tang et al patent is only cited to show that it well known in the art to treat a material with a reducing agent after being treated with an oxidizing or bleaching agent. Accordingly, the rejection of Claims 41, 54, and 57-61 under 35 U.S.C. 103(a) as being unpatentable over the Besemer et al patent in view of the Ashida et al patent or the Chen et al patent as applied to Claims 1, 2, 4-7, 30-48 and

Art Unit: 1623

50-63 above, and further in view of the Tang et al patent is maintained for the reasons of record.

### ***Claims Objected to***

11. Claims 8-29, 64-76, 78 and 79 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Reasons for the Indication of Allowable Subject Matter***

12. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach or fairly suggest the claimed specific nitroxide compounds used to oxidized a carbohydrate compound.

### ***Summary***

13. Claims 1, 2, 4-7, 30-48 and 50-63 are rejected; Claims 8-29, 64-76, 78 and 79 are objected to; Claims 3, 49 and 77 are withdrawn from consideration.

### ***Conclusion***

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 1623

***Examiner's Telephone Number, Fax Number, and Other Information***

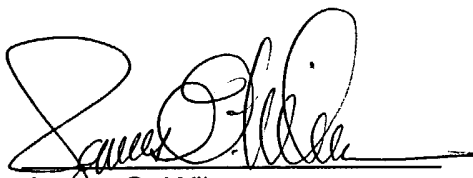
15. For 24 hour access to patent application information 7 days per week, or for filing applications, please visit our website at [www.uspto.gov](http://www.uspto.gov) and click on the button "Patent Electronic Business Center" for more information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is (571) 272-0660. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reached on (571) 272-0661. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

  
E. White

  
James O. Wilson  
Supervisory Primary Examiner  
Technology Center 1600